

ABSTRACT OF THE DISCLOSURE

The invention relates to the vibration damper systems (here, method and apparatus) for active removal of beyond-normal internal vibrations from turbine-generator-sets [T-G-Ss*]. The invention relies on dynamic forces generated by a pair of “wings” and associated hardware mounted on the bearing housing, which operate to offset internally produced vibrations in an active or “real time” fashion. This is in contrast to the typical method of taking the turbine-generator off-line, shutting it down and then eliminating the source of vibration. The invention allows the generator to remain operational during adjustments. Thus, it remains on-line producing electricity and associated revenue. The system may be installed at presently operating T-G-Ss. It also foresees the simple developments to be done in future designed T-G-Ss for use of this method. The use of invention provides a real solution to internal vibrations that develop in turbine-generator-sets throughout their lifetime.